II. Characteristics of Grant Recipients and Project Partners

In this chapter we describe the organizations involved in developing and implementing the 1994 and 1995 TIIAP projects. These organizations include the direct grant recipients' partners that assumed primary responsibility for project management and administration, and the partner organizations that provided support for the project within the community.

KEY FINDINGS

While the 1994 and 1995 TIIAP grants were provided to a wide variety of organizations, we found that education and community organizations represented the two most common categories of grant recipients. Education organizations also represented the most common category of partner organizations.

A wide variety of organization types served as grant recipients. Overall, two-fifths of access and demonstration grant recipients were education organizations, including institutions of higher education (23.7 percent) and K-12 schools or school systems (13.7 percent). In addition, just over one-third were community service organizations, including social service agencies (24.4 percent) and libraries (6.1 percent).

TIIAP projects involved multiple partnerships. Grant recipients in demonstration and access projects established new (or continued existing) partnerships with an average of 3.4 organizations (the number of organizations that grant recipients informally collaborated with was likely much higher). Over three-quarters of the projects partnered with at least one educational organization—generally a higher education institution (33.1 percent) or K-12 school or school system (27.8 percent). In addition, a significant proportion of projects (60.9 percent) formally collaborated with at least one private sector entity. In fact, almost one-quarter (23.4 percent) of all demonstration and access partnerships were with private sector organizations. Grant recipients in planning projects partnered with an average of 3.7 organizations. Of the 177 partners listed, 27.7 percent were educational organizations, 24.3 percent were government organizations, and 23.7 were community organizations.

The primary contributions of project partners involved human resources. While demonstration and access partners assisted in a variety of ways, their primary contribution was providing personnel (60.2 percent of projects), intellectual capital (59.3 percent), or space or facilities (48.1 percent). Education partners tended to provide the broadest array of contributions. Not surprisingly, private sector partners were most likely to provide equipment, equipment discounts, and reduced rates for services. The most common contribution among planning partners was providing intellectual capital (64.4 percent).

Establishing and maintaining partnerships was a valuable, yet demanding, activity. Findings from the survey and case studies suggest that projects can take some pragmatic steps to strengthen their partnerships, including (1) identifying partners who are truly committed to

the project; (2) establishing clear written agreements delineating all roles and responsibilities; and (3) communicating with all project partners on an ongoing basis.

GRANT RECIPIENT ORGANIZATIONS

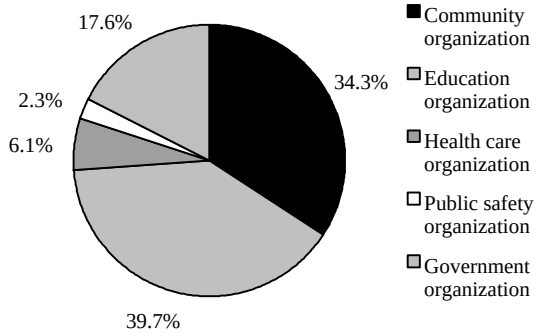
State, local, and tribal governments, colleges and universities, and nonprofit entities are eligible to apply for TIIAP funds; individuals and for-profit organizations are not. Grant recipients are responsible for ensuring that matching funds are provided toward the total project cost. During the 1994 and 1995 program years, the criteria for reviewing applications included not only an assessment of the merits of the proposed project, but also an assessment of the applicant's experience and expertise as they relate to the organization's ability to bring the project to a successful conclusion.

Types of Organizations Receiving TIIAP Awards

To a large extent, the types of organizations receiving TIIAP awards in 1994 and 1995 reflect the focus of projects themselves. For example, each of the three public safety demonstration and access projects surveyed was managed by a public safety organization—two law enforcement agencies and one professional association (Table 2-1). And all eight health care organizations receiving TIIAP awards managed projects in the health application area. Four of these were hospitals or clinics, two were medical schools, one was a public health agency, and the last was a nonprofit health association.

Figure 2-1 shows the distribution of 1994 and 1995 demonstration and access grants by type of organization serving as the grant recipient.

Figure 2-1
Distribution of 1994 and 1995 demonstration and access grants, by type of organization (n=135)



Source: 1998 mail survey of TIIAP grantees.

Education organizations served as grant recipients more frequently than any other organization type (39.7 percent). The vast majority of these organizations were higher education institutions (23.7 percent) and K-12 schools or school systems (13.7 percent). The remaining education organizations to serve in this capacity were educational consortia and nonprofit agencies providing educational services and resources. These 52 grant recipients were more likely to manage projects in the ECLL application area (62.7 percent) and less likely to manage projects in the public services area (14.8 percent).

Community organizations were the next most frequent type of grant recipient (34.4 percent). The 45 organizations in this category were composed predominantly of nonprofit public service agencies, although eight libraries, two museums, two community development organizations, and one public television station were included here as well. These types of organizations were most likely to manage projects in community networking (11.5 percent) and in public services (11.5 percent). They were less likely to manage projects in ECLL (9.9 percent) or health (1.5 percent).

A somewhat lesser number of TIIAP awards were granted to government agencies (17.6 percent). The 23 grant recipients in this category included 10 state agencies, 6 city or municipal agencies, and a varied assortment of other institutions, agencies, and commissions. Their oversight was relatively equally distributed among public services, community networking, and ECLL projects (5 to 6 percent).

Table 2-1
Organizational representation among grant recipients, by application area: 1994 and 1995 demonstration and access grants

Organization type	Application area					Total (n = 131)
	Community networking (n = 34)	ECLL (n = 51)	Health (n = 16)	Public safety (n = 3)	Public services (n = 27)	
Education organizations	**12**	**32**	**4**	**0**	**4**	**52**
Higher education institution or consortium	9	16	3	0	3	31
K-12 school or school system	3	14	1	0	0	18
Adult education organization	0	1	0	0	0	1
Nonprofit local education agency	0	1	0	0	0	1
Educational television network	0	0	0	0	1	1
Community organizations	**15**	**13**	**2**	**0**	**15**	**45**
Social service agency	11	4	2	0	15	32
Library	2	6	0	0	0	8
Museum or other cultural entity	0	2	0	0	0	2
Community development organization	2	0	0	0	0	2
Media organization	0	1	0	0	0	1
Governmental organizations	**7**	**6**	**2**	**0**	**8**	**23**
State government agency	0	4	2	0	4	10
Other government entity	3	2	0	0	1	6
City or municipal government	3	0	0	0	2	5
County government agency	0	0	0	0	1	1
Tribal government	1	0	0	0	0	1
Health care organizations	**0**	**0**	**8**	**0**	**0**	**8**
Hospital	0	0	3	0	0	3
Medical school	0	0	2	0	0	2
Clinic, medical center, or specialized practice	0	0	1	0	0	1
Public health agency	0	0	1	0	0	1
Professional association	0	0	1	0	0	1
Health maintenance organization	0	0	0	0	0	0
Public safety organizations	**0**	**0**	**0**	**3**	**0**	**3**
Law enforcement agency or department	0	0	0	2	0	2
National public safety association	0	0	0	1	0	1

Source: 1998 mail survey of TIIAP grantees.

Exhibit 2-1
Example of a cross-sector grant recipient

LOS ANGELES FREE-NET
1994 Demonstration Project in Community Networking

The Los Angeles Free-Net provides an interesting organizational structure and example of cross-sector work conducted by TIIAP grant recipients. The grant recipient organization was the Los Angeles Free-Net Division of the H.O.P.E. Unit Foundation, an organization offering counseling and education for people with cancer, housed at the Encino-Tarzana Regional Medical Center in Encino, California.

LAFN is staffed almost entirely by volunteers. The three key personnel involved in the TIIAP project are the president and founder, who is a clinical professor of medicine and chief of staff of the hospital, the operations director, who is a physicist and entrepreneur, and a computer scientist and technology consultant. Additionally, a retired aerospace engineer designed the physical setup of the modem rack and is currently writing the program to monitor system usage. A retired teacher has a broad role in the LAFN that includes content management, infrastructure maintenance, and training. A senior citizen coordinates the LAFN mentors, registrars, and other volunteer staff, and moderates the user suggestion box. A physician serves as medical advisor and webmaster for LAFN's Health and Medical Interest Center, managing content and ensuring that the information provided is valid, current, and accurate. A community college instructor serves as education advisor and webmaster for LAFN's Education and Lifelong Learning Interest Center.

In addition to these key LAFN staff members, 6 volunteers handle registration for new users; 12 webmasters are responsible for creating and maintaining the LAFN interest centers with extensive involvement from the users; 66 LAFN users serve as volunteer mentors, responding to user requests for technical assistance and occasionally making visits to users' homes to provide onsite assistance; and approximately 50 moderators oversee the activities of the various LAFN newsgroups.

Source: 1998 case study.

Some patterns also emerged among the types of grantee organizations and the types of projects they ran. Six of the eight health care organizations receiving grants managed demonstration projects, suggesting that exploring new and improved ways to deploy information infrastructure is a greater concern among health care organizations than is increasing access to information. The opposite pattern of priorities was evident among nonprofit public social service agencies, one of the community organizations considered. A comparatively high proportion (34.1 percent) of the access projects were managed by this type of organization, suggesting a greater need to provide basic connections to information infrastructure, as opposed to developing unique and innovative approaches to doing so.

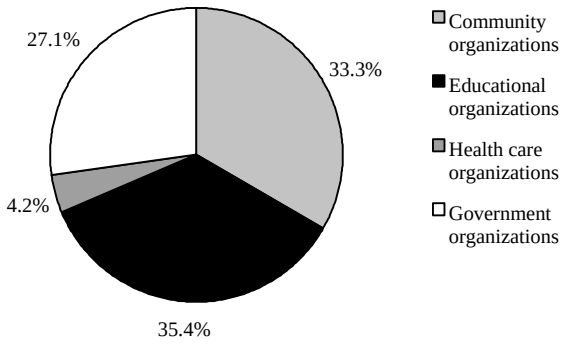
This division into specific sectors masks the fact that in some cases the staffing and organization of the projects showed strong cross-sector representation. The Los Angeles Free-Net is an example of this combining of social service workers, educators, scientists, and community members and physicians. Exhibit 2-1 describes this project in greater detail.

Planning projects had a similar distribution of grant recipients by organization type (Figure 2-2). Over one-third of planning grants were awarded to educational institutions, with 20.8 percent going to higher education institutions. Community organizations received 33.3 percent of planning grants, with 10.4 percent going to nonprofit organizations. About one-fifth (20.8 percent) of the planning grants went to state government agencies.

We found in our case study sites that grant recipients generally had experience with technology projects prior to their TIIAP grant. Several were in existing computer services departments in K-12 school systems, universities, cities, or state offices and were responsible for providing, maintaining, and monitoring computer services, including local and wide area networks, training services, and/or data processing. However, many of these had little Web experience

since the Internet was as not widely available or used in 1994 when many of the projects began.

Figure 2-2
Distribution of 1994 and 1995 planning grants, by type of organization (n = 48)



Source: 1998 mail survey of TIIAP grantees.

Two of the access and demonstration case study sites were also previous TIIAP grantees. The Oklahoma Department of Commerce and the Jefferson County (Kentucky) Public Schools had received TIIAP planning grants. Both used funds to develop infrastructure plans, conduct research on what telecommunications needs should be addressed, and determine what systems could be used.

PARTNER ORGANIZATIONS

In accordance with the TIIAP's emphasis on widespread community involvement, grant recipients are encouraged to establish partnerships with diverse sectors of the community that will complement their own talents and resources and actively contribute to the planning, implementation, and long-term sustainability of the project. Partner organizations may provide advice, leverage financial support, and serve as community advocates for the project.

Types of Organizations Serving as Project Partners

Demonstration and access projects were asked to list all organizations that served as partners in their TIIAP project. Survey respondents listed 457 partners, or an average of 3.4 partner organizations per project (the number of organizations that grant recipients informally collaborated with was likely much higher). Consistent with our findings about grant recipient organizations, the most frequently represented type of organization to serve as a project partner to the 1994 and 1995 TIIAP projects were education organizations. Over three-quarters (76.7 percent) reported having one or more educational institutions as a partner. A total of 135 K-12 schools, school systems, colleges, universities, and other education organizations were reported as project partners (Table 2-2). In contrast to the patterns that emerged in our examination of grant recipient organizations, a greater number of government agencies than community organizations served as partners to TIIAP projects.

It should be noted that this average number is lower than what might be expected from anecdotal information obtained during the site visits. We cannot say for sure why this occurred. One possibility is that the burden of reporting detailed information on <u>each</u> partner organization may have caused some respondents to limit their answers to this item.

Although for-profit organizations are not eligible to receive TIIAP funds, they do serve an important partnership role in many projects. Nearly 61 percent of the demonstration and access respondents reported forming at least one private sector partnership. Of the 457 total partner organizations listed on the mail surveys, 107 (23.4 percent) were organizations from the private sector.

As shown in Table 2-3, the average number of partners for planning grants was 3.7, slightly more than reported for demonstration and access.

Table 2-2
Percentage of TIIAP projects reporting partnerships with community organizations and total number of partners involved: 1994 and 1995 demonstration and access grants

Organization type	Percentage of projects (n = 133)	Total partners
Education organizations	**76.7**	**135**
K-12 school or school system	27.8	58
Higher education institution	33.1	55
Other education entity	12.0	17
Adult education organization	3.8	5
Early childhood organization	0.0	0
Private sector organizations	**60.9**	**107**
Other private entity	24.1	46
Private foundation or institute	9.0	17
Independent telephone company	6.8	15
Regional Bell operating company	9.8	13
Media organization	7.5	11
Cable company	3.8	5
Governmental organizations	**55.6**	**89**
State government agency	19.5	31
City or municipal government	15.0	24
County government agency	10.5	17
Other government entity	9.0	15
Tribal government	1.5	2
Community organizations	**51.9**	**86**
Nonprofit organization or entity not listed elsewhere	20.3	35
Library	18.8	28
Community development organization	6.0	10
Other community organization or entity	3.8	7
Museum or other cultural entity	3.0	6
Health care organizations	**18.0**	**34**
Hospital	6.0	14
Clinic, medical center, or specialized practice	3.0	7
Public health agency	5.3	7
Medical school	2.3	3
Health maintenance organization	0.8	2
Other health care entity	0.8	1
Public safety organizations	**3.0**	**6**
Law enforcement agency or department	1.5	4
Fire and rescue agency or department	0.8	1
Emergency agency or department	0.8	1
Other public safety entity	0.0	0
Total	100.0	457

Note: Respondents could select more than one item. Details may not add to totals because of rounding.
Source: 1998 mail survey of TIIAP grantees.

Table 2-3
Organizational representation among grant recipients and project partners: 1994 and 1995 planning grants (n = 48)

Organization type	Number of grant recipients	Percentage of projects reporting partnerships	Number of project partners
Education organizations	**17**	**56.3**	**49**
Higher education institution	9	43.8	30
K-12 school or school system	1	12.5	10
Other education entity	7	14.6	9
Early childhood organization	0	0.0	0
Adult education organization	0	0.0	0
Community organizations	**16**	**50.0**	**42**
Nonprofit organization or entity not listed elsewhere	5	16.7	14
Other community organization or entity	5	18.8	11
Community development organization	1	8.3	9
Library	4	12.5	8
Museum or other cultural entity	0	0.0	0
Public broadcasting station	1	0.0	0
Governmental organizations	**13**	**50.0**	**43**
State government agency	10	29.2	22
Other government entity	1	14.6	8
City or municipal government	0	10.4	5
Tribal government	2	8.3	5
County government agency	0	6.3	3
Health care organizations	**2**	**10.4**	**10**
Hospital	0	6.3	6
Other health care entity	2	14.6	2
Clinic, medical center, or specialized practice	0	2.1	1
Public health agency	0	2.1	1
Medical school	0	0.0	0
Health maintenance organization	0	0.0	0
Public safety organizations	**0**	**0.0**	**0**
Law enforcement agency or department	0	0.0	0
Fire and rescue agency or department	0	0.0	0
Emergency agency or department	0	0.0	0
Other public safety entity	0	0.0	0
Private sector organizations	**0**	**37.5**	**33**
Other private entity	0	14.6	12
Media organization	0	14.6	8
Private foundation or institute	0	10.4	5
Independent telephone company	0	10.4	5
Regional Bell operating company	0	6.3	3
Cable company	0	0.0	0
Total	**48**	**100.0**	**177**

Source: 1998 mail survey of TIIAP grantees.

Fewer planning grant recipients partnered with education organizations (56.3 percent) and private sector organizations (37.5 percent). Of the 177 partners, 27.7 percent were education organizations, 24.3 percent were government organizations, 23.7 percent were community organizations, 18.6 percent were private sector organizations, and 5.6 percent were health organizations.

Contributions of Partner Organizations

Partner organizations contribute to TIIAP projects in many ways (Table 2-4). Their primary contributions involved human resources. A majority of partner organizations (60.2 percent) provided personnel who assumed a specific, ongoing staff assignment throughout the project period. A slightly smaller majority of partner organizations also provided expertise or intellectual capital on an as-needed basis outside the parameters of a formalized staff position (59.3 percent).

Partner organizations often provided capital and material resource contributions as well. Each of the five capital or material resource contributions addressed on the mail survey was reported to have characterized one-third or more of all partnerships. Examples of material resources contributed by project partners include equipment, office space, equipment facilities, and data access. Capital contributions included monetary contributions for operational expenses, as well as equipment discounts and in-kind or reduced rates for services.

As also shown in Table 2-4, different types of partner organizations tended to contribute to TIIAP projects in unique ways.

- Education organizations tended to provide the broadest array of contributions; as a group, their extent of involvement was above average for every type of contribution examined on the survey.
- Private sector organizations were the least likely type of organization to provide personnel, space or facilities, or data access and the most likely to provide equipment, equipment discounts, and reduced rates for services. The most frequent contribution they made was technical expertise (see Exhibit 2-2).
- Government organizations, on the other hand, were the least likely to provide equipment, equipment discounts, and reduced rates and appeared to be in the best position to provide discretionary funding.

Table 2-4
Percentage of partner organizations providing contributions to the project, by organization type: 1994 and 1995 demonstration and access grants

Contribution	Types of organizations						Total (n = 457)
	Health care (n = 34)	Education (n = 135)	Public safety (n = 6)	Government (n = 89)	Community (n = 86)	Private sector (n = 107)	
Provided personnel	70.6	65.9	33.3	59.6	73.3	41.1	60.2
Provided expertise or intellectual capital	55.9	61.5	0.0	56.2	68.6	56.1	59.3
Provided space or facilities	73.5	55.6	83.3	38.2	66.3	22.4	48.1
Provided in-kind or reduced rates for services	41.2	47.4	16.7	36.0	37.2	51.4	43.3
Provided funding	38.2	40.0	33.3	44.9	37.2	38.3	39.8
Provided equipment or equipment discounts	29.4	40.7	16.7	22.5	27.9	47.7	35.2
Provided data access	32.4	37.8	83.3	31.5	47.7	18.7	34.1

Note: Respondents could select more than one item.

Source: 1998 mail survey of TIIAP grantees.

- Community organizations were more likely to provide both personnel and expertise than were any other type of organization. They also provided space and facilities to a higher than average extent.
- Health care organizations provided both personnel and physical space or equipment facilities to a unique extent.
- Of the six public safety organizations reported as project partners, none provided expertise or intellectual capital, whereas five provided space and data access.

Exhibit 2-2
Example of a partner providing technical expertise

QUALITY EDUCATIONAL SCHOLASTIC TRUST (QUEST)
1995 Access Project in ECLL

In many cases where partners provided personnel, it was because they had technical expertise. For example, in western Massachusetts, a TIIAP project established a wide area network (WAN) to bring Internet and other technology services to school and college sites throughout the county. The grant recipient, Quality Educational Scholastic Trust (QUEST), is a nonprofit corporation whose purpose is to provide access to state-of-the-art technology to all schools within Berkshire County and to provide students and teachers with the training and assistance that they need to take full advantage of those technologies. As a prior business partner to QUEST, the Lockheed Martin Corporation facility in Pittsfield agreed to assume a major role in design and technical activities for the network, essentially working as part of the project staff. Lockheed Martin technical staff oversaw and maintained the technical data needs of the infrastructure, such as subnet addresses, domain-name server addresses, IP addresses and authorized user IDs, for all sites. Lockheed Martin's technical service contributions included quarterly seminars for faculty from throughout the county and onsite visits to individual schools as needed.

Source: 1998 case study.

For the most part, planning partners' contributions followed similar trends as demonstration and access partners. A smaller percentage of planning than of access and demonstration partners provided contributions in all but one category. In fact, 9 to 18 percent fewer planning partners provided contributions of personnel, reduced rates, funding, and equipment. And more planning partners than access and demonstration partners (64.4 percent compared to 59.3 percent) provided expertise or intellectual capital. These differences would be expected since planning projects in general did not require space, equipment, or reduced rates, but they did need expertise in developing their plans.

Partners provided several types of reduced rates, including those for ongoing connection costs as well as those for contracted services such as wiring, website development, and user support. For example, Project InterLinc in Lincoln, Nebraska, developed public access through building an infrastructure and providing access to hardware, as well as building websites supporting the delivery of government and related services to Lincoln and Lancaster County residents. Several project partners were major contributors to the overall success of Project InterLinc. NAVIX, the Internet service provider (ISP) for InterLinc terminals, offered a 50 percent reduction in their ISP rate for 18 months during a 3-year contract, which amounted to approximately $44,000 of an in-kind donation. Another key partner was Information Analytics, a computer consulting firm that offered technical support for building websites at a 20 percent reduction in rates for Project InterLinc.

Generally, partner organizations did not receive financial compensation for their contributions to the project. Only about one-third of the partner organizations were reported to have received payment as a subrecipient of TIIAP funds, an arrangement that occurred most often with the community organization partners (51.2 percent) and least often with the private sector partners (18.7 percent). Twenty-six percent of planning grant partners were subrecipients of TIIAP funds.

There are clearly factors other than financial ones driving the TIIAP partnerships. In fact, the majority of partnerships (62.7 percent) represent the continuation of a working relationship that existed prior to the TIIAP collaboration.

Selecting and Working with Partners

An open-ended question on the survey allowed project directors to provide the reflections and advice on how best to establish and work with partnering organizations. The comments offered are extremely interesting and provide some useful guidance for TIIAP and future grant recipients. Loudly and clearly, the respondents stressed the importance of establishing clear written agreements with partners that laid out in concrete terms expectations and responsibilities; making sure that these agreements are worked out upfront as part of the planning process; and keeping open and frequently utilized ongoing communication. Project directors also stressed the importance of having partners with real enthusiasm and personal investment in the outcomes who are truly committed to the project. As we will note in later chapters, failure of partners to meet their commitments posed problems for many projects. Some recommendations from the project directors on working with partners are presented below:

- *Clarify intentions; have written agreements.*
- *Have a clear ideal of where all concerned are at the beginning of the project and at checkpoints along the way, and be sure that there is a understanding of the common goals that are central to a focused project.*
- *Identify partners with similar missions/goals, keep communication lines open, get total buy-in; clarify roles and responsibilities of all partners.*
- *Identify roles, responsibilities, and accountability early in the process.*
- *Be sure that contributions and benefits are documented; share the credit for success broadly.*
- *Make it a win/win situation.*